

CLAIMS

- [001] An electric household appliance, especially a dishwasher, comprising a door (95) and a door lock (101 for said door (95), comprising: a frame (10) with an opening (36) for a hook (38), a closing member (12) such as a closing lever (12) in said frame (10), a closing spring (16) disposed between said closing member (12) and a counter-bearing (18) in said frame (10), said closing member (20) being connected to a gripping device (20), characterised in that a pin (70) or slide which can be moved between two positions, inhibits the movement of the closing member (12) in a first position for activating a child safety features and in a second position of the pin (70) for deactivating the child safety feature the movement of the closing member (12) is not inhibited.
- [002] The electric household appliance according to claim 1, characterised in that in the first position with the child safety feature activated the movable pin (70) is inserted into a recess (71) of the closing lever (12) or rests on the edge of the closing lever (12) and the movement of the closing lever (12) is thereby positively inhibited.
- [003] The electric household appliance according to claim 1 or claim 2, characterised in that disposed on the movable pin (70) is a locking head (74) which in the first position of the pin (70) with the child safety feature activated, is inserted in a recess (73) of a portion of the door (95), for example, a side wall (72) of the frame (10) or a control panel so that as a result of a positive connection between the locking head (74) and the boundary of the recess (73), the forces applied to the pin (70) are transferred to the boundary of the recess (73).
- [004] The electric household appliance according to any one of the preceding claims, characterised in that in the second position with the child safety feature deactivated, the movable pin (70) is located outside the recess (71) or the edge of the closing lever (12) and thereby the movement of the closing member (12) is not inhibited.

[005] The electric household appliance according to any one of the preceding claims, characterised in that the pin (70) can preferably be moved in a direction of movement perpendicular to the direction of movement of the closing member (12) and the pin (70) has a conical shape with increasing diameter beginning at the free end of the pin (70) so that when very high forces act on the closing member (12), as a result of a small angle of inclination, i.e. 20° between the circumferential surface of the pin (70) and the bearing surface on the pin (70), e.g. the boundary surface of the recess (71), the pin can be moved into the second position due to resulting normal forces in the pin (70).

[006] The electric household appliance according to any one of the preceding claims, characterised in that the closing spring (16) is tensioned in an open position of the door lock (101), the gripping device (20) is pressed against a part (26) of the frame (10) or in the frame by the closing spring (16) at a contact point (28) in the open position of the door lock (101), thus preventing the release of the spring, the gripping device (20) has a gripping latch (34) into which a hook (38) is guided on passing through the opening (36) in the frame and has a contact surface (42) onto which the incoming hook (38) presses, thereby causes a movement of the gripping device (20) and the gripping device is shaped so that it loses contact with the contact point during a movement of the hook (38) and the closing spring (16) can thereby be released.

[007] The electric household appliance according to any one of the preceding claims, characterised in that the pin (70) is fixed to a pivoted shaft (76) by means of a pivoted lever (75) so that the pin (70) can execute a rotary movement from the first position into the second position and conversely.

[008] The electric household appliance according to claim 7, characterised in that by means of a restoring lever (80) connected to the pivoted shaft (76) and a spring (81), a restoring moment can be applied to the pivoted shaft (76) so that the pin (70) is pressed into the first position to active the child safety feature.

- [009] The electric household appliance according to claim 7 or 8, characterised in that a preferably rectangular plate (86) made of plastic with a locating lug (87) and a limiting lug (88) is formed on an adjusting lever (82) connected to the pivoted shaft (76) wherein as a result of the thickness of the plate (86), said plate (86) can be elastically deformed under application of small forces.
- [010] The electric household appliance according to claim 9, characterised in that beginning with the free end, the adjusting lever (82) projects partly over a slot-shaped recess in a gripping shell (93) into a handle of the door (95) such that as a result of a movement of the adjusting lever (82) the pin (70) can be moved from the first position into the second position to activate and deactivate the child safety features, wherein the direction of movement of the adjusting lever (82) in the handle is preferably lateral and horizontal.
- [011] The electric household appliance according to claim 10, characterised in that the adjusting lever (82) can be detachably fixed in the second position of the pin (70) for continuous deactivation of the child safety feature, whereby the adjusting lever (82) rests with a limiting strip on a flat area, e.g. of the panel dish and the movement of the adjusting lever (82) to the first position is blocked by the locating lug (87) on the limiting strip (87).
- [012] The electric household appliance according to claim 11, characterised in that to activate the child safety feature, the locating lug (87) can be raised over the limiting strip through a small recess in the gripping shell (93) of the handle using a pointed object, so that as a result of the force of the spring (81), the adjusting lever (82) can be moved into the first position and for continuous deactivation of the child safety feature, the locating lug (87) can be raised over the limiting strip using a pointed object whilst simultaneously activating the adjusting lever (82) in the handle.

- [013] The electric household appliance according to any one of claims 1 to 6, characterised in that the pin (70) is arranged on an actuating slider (90) in a slider housing (91) and by means of a translational movement of the actuating slider (90) in the slider housing (91), the pin (70) can be moved between the first position and the second position and conversely, preferably between two stop points.
- [014] The electric household appliance according to claim 13, characterised in that an actuating lever (92) is formed on the actuating slider (90) which projects via a slot in the gripping shell (93) of the handle therein and the actuating slider (90) can thereby be moved from the handle with the actuating lever (92) between the first and second position, wherein the actuating lever can be pressed into the first position by a spring.
- [015] The electric household appliance according to claim 14, characterised in that a locating lug (94) is formed on the actuating slider (90) which in the second position of the actuating slider (90) engages in a recess of the slider housing (91) and preferably either the displacement of the actuating slider (90) from the second position into the first position can be executed only by the actuating lever (92) or the locating lug (94) must be additionally pressed in via a recess on the gripping shell (93) of the handle using a sharp object.
- [016] The electric household appliance according to any one of claims 1 to 9, characterised in that the movement of the pin (70) from the first to the second position and conversely to activate and deactivate the child safety feature is adjustable from the top (96) of the door (95) using an actuating element (97).
- [017] The electric household appliance according to claim 16, characterised in that the actuating element (97), e.g a lever, a cup-shaped disk or a part which can be actuated using a screwdriver is arranged fixedly or removably on the top (96).

- [018] The electric household appliance according to claim 17, characterised in that the actuating element (97) is connected to an actuating shaft (98) on which a cam 30 (90) is formed and using the cam (99) on the actuating shaft (98) the pivoted lever (75) with pin (70) can be moved from the first into the second position and conversely.
- [019] The electric household appliance according to any one of claims 1 to 6, characterised in that the movement of the pin (70) from the first to the second position and conversely to activate and deactivate the child safety feature can be executed by a preferably electric actuator, e.g. a wax expansion element, a bimetal part, an electromagnet or an inserted/withdrawn memory part.
- [020] The electric household appliance according to claim 19, characterised in that the actuator can be controlled using an electric, electronic or mechanical control using a specific control logic wherein, for example, the child safety feature is continuously activated, only activated during operation or a certain button or button combination must be pressed to deactivate the child safety feature.
- [021] The electric household appliance according to claim 19, characterised in that the actuator can be controlled by remote control, preferably via a radio signal or via the internet.